DOCUMENT RESUME

ED 135 662 UD 016 695

AUTHOR Katz, Phyllis
TITLE Modification of Children's Racial Attitudes. Final Progress Report.
INSTITUTION City Univ. of New York, N.Y.
SPONS AGENCY Office of Child Development (DHEW), Washington, D.C.
PUB DATE 76
GRANT OCD-151
NOTE 64p.; Appendix B. Copyrighted sections of this document entitled "Toward the Elimination of Racism; Doll Preferences..."; "Children's Self Image of Disparity...;" and "Children's Attitudes Towards Blacks..." have been deleted.

EDRS PRICE MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS *Age Differences; *Attitude Tests; *Bias; Changing Attitudes; *Childhood Attitudes; Elementary Education; Grade 2; Grade 5; Racial Attitudes; *Racial Differences; Racial Factors
IDENTIFIERS *New York (New York)

ABSTRACT

This study investigated some of the attitudinal and behavioral components of racial prejudice in elementary school children. It also assessed the effectiveness of various modification procedures upon children's racial attitudes and inter-group behavior at different age levels. A four-stage research design was used. The pre-test stage involved administering three attitude measures (the Katz-Zalk Projective Prejudice Test; the Koslin Social Distance Scale; and the Friendship Questionnaire) in group form to all of the children in the second and fifth grades in two public elementary schools. One was in New York City, and the other was in a nearby suburban community. The city school was about 35% black and the suburban school was 25% black. High scoring white children were given a series of individually administered behavioral measures in a play session with black and white examiners. In the experimental phase, equal numbers of children at the two age levels were randomly assigned to a number of treatment-conditions or control groups. Two weeks after the experimental phase, the battery of attitude and behavioral indices were again administered, and re-administered again from four to six months later. In addition to age and treatment, race of the examiner was also systematically varied. The major finding of the study was that all experimental subjects (as a combined group) showed less prejudice than did the controls after a short term retest. (Author/AM)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes ever effort to obtain the best copy available. Nevertheless, items of marginal reproducibility are often encountered and this affects th quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS) EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made fro the original.

ED135882

FINAL PROGRESS REPORT:

MODIFICATION OF CHILDREN'S RACIAL ATTITUDES

Grant #OCD-151

Phyllis A. Katz
Principal Investigator

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

PURPOSE AND DESIGN

The present study had two major goals: (a) to investigate some of the attitudinal and behavioral components of racial prejudice in elementary school children and (b) to assess the relative efficacy of various modification procedures upon children's racial attitudes and inter-group behavior at different age levels.

Ethnic attitudes in children have been studied by many investigators over the past four decades. These studies, for the most part, have been mostly atheoretical, descriptive and have not focused upon modification. Much of our present knowledge about children's racial attitudes is based upon data which may no longer be valid, (because of the kinds of instruments used), and can be characterized as having methodological problems, a relative lack of theory, or dependence upon theoretical positions which have not generated testable hypotheses regarding the modification of negative racial attitudes.

There are several recent studies, however, that have used various change procedures with children (Williams & Edwards, 1969; Katz, 1973; Litchner & Johnson, 1969). These appear to be effective, at least on a short-term basis. There have been no studies, however, which have compared different procedures, different age groups or assessed the long term effects of these procedures.

UD016695

The question of the efficacy of an attitude change technique is a complex one, since racial attitudes, even in children, are not simple. Both urban and suburban children are relatively sophisticated about expressing attitudes in this area, are generally cognizant of what the "expected" answer is on direct questionnaires, and show rather complicated response patterns (Katz, Zalk & Sohn, 1975; Zalk & Katz, 1976). Because of this, many children may be readily sensitized to the modification procedures, and behave in a way which conforms to experimenter expectations.

The most prevalent type of modification study employs a test-retest design, with an intervening manipulation. The test has generally been a verbal one, which makes the above considerations particularly salient. In the present study, we attempted to broaden the definition of effectiveness in two ways: (a) by including behavioral, non-verbal measures of attitudes, and (b) by obtaining both short-term and long-term measures on the children. In addition, we used children at two developmental levels (second and fifth grades) in order to investigate the issue of whether certain techniques might be more effective at younger or older age levels.

A four-stage research design was employed. The first stage, the pre-test, involved administering three attitude measures in group form to all of the children in the second and fifth grades of two public elementary schools. One was in New York City, and the other was in a near-by suburban community. Both schools were racially integrated. The city school was about 35% black, and the suburban school was about 25% black. All white children who scored in the upper half of the distribution were subsequently given a series of individually administered behavioral measures in a play session with black and white examiners. Childrens' initial tendencies to play with, imitate and distance themselves from a black examiner was assessed in this portion of the study.

Following this, the experimental phase was conducted, in which equal numbers of children at the two age levels were randomly assigned to a number of treatment or control groups. Four major treatment conditions were employed: (1) Integrated group problem-solving (the increased contact approach), (2) Positive reward for black choices (the reinforcement approach), (3) Involvement in stories with black characters (the vicarious contact approach), and (4) Techniques for increasing individuation of black faces (the perceptual differentiation approach). The control groups for each of these conditions included: (1C) Non-integrated group problem-solving, (2C) Positive reward for non-race-related colors (e.g. green), (3C) Viewing stories with white characters, and (4C) Perceptual differentiation of white faces.

Two weeks after the experimental phase, the battery of attitude and behavioral indices was again administered in the first post-test. The final stage, the second post-test was conducted from four to six months later, and consisted of the same inventory. In addition to age and treatment, the race of the examiner was also systematically varied so that half of the children in each group were initially tested by a white examiner and half by a black examiner. The race of the examiner was kept constant for the children throughout the various phases of the study.

SPECIFIC PROCEDURES

Pretest Battery

Attitude Measures - As noted above, three attitude measures were administered. These included: (1) the Katz-Zalk Projective Prejudice Test; (2) the Koslin Social Distance Scale, and (3) the Friendship Questionnaire. The first index consists of 55 slides depicting children in ambiguous situations in school. Of the 55, 4 are buffer items utilizing same-race, same-sex children

and 38 are racial choice items showing two or four different race (but same-sex children), either vying for a positive reward, or potentially initiating a negative event (e.g. aggression). The subject is given a verbal description and asked to choose the child who will be the recipient of the positive event (e.g. winning a trophy), or the initiator of the negative event (e.g. who started the fight). There are 17 positive items, and 21 negative items, and the scores for each can be considered separately or added to get a total racial attitude score. Further differentiation of the scores into eight subscales is possible (see Zalk & Katz, 1976), although this was not done in the present data analysis. In addition to the buffer and racial items, 13 slides on the test depicted same-race, but different sex children in similar situations, and choices to these items constitute a sex-bias score. As in the racial choice items, some of the situations were positive, and some were negative.

The Koslin Social Distance Scale is a non-verbal index in which the child is asked to place a gummed back target stick figure (the self) or a same-race, same-sex figure as close to other figures as he or she wishes. These other figures are either same-race, same gender; same-race, different-gender; different-race, same-gender, or different-race, different-gender. These scores (which are literally a measure of distance between target and other figure) can be used separately or in combination. For purposes of the present study, self and same-sex, other-race distance items were used.

The Friendship Questionnaire simply asked the child to choose three other children in the class that he or she would prefer to share certain activities (e.g. lunch, study, sit near). The score utilized here was simply the number of black student choices the child made.

Each of these three indices is contained in Appendix A.

Behavior Measure Sequence - For this portion of the assessment, subjects were brought individually to an experimental room. They were introduced to two adults (a white and a black female). There were three activities the child engaged in: (a) making a design on a flannel board with felt cut-outs; (b) coloring a picture, and (3) engaging in a discrimination learning task. Each of these activities involved working with an adult. For the flannel board game, the black examiner stood at one end of an eight foot wide flannel board. The subject was given five felt pieces and asked to make a design. The other-race social distance measure is the average distance the subject placed the five forms from the examiner. These scores could range from 1 to 8. Following this, the subject was invited to take a seat, and could choose to sit opposite either the same-race or different race examiner who were both engaged in coloring a picture. One colored a hippopotamus green and the other colored a whale orange. One put their name at the top of the picture, and the other wrote it at the bottom. The subject was asked to color a picture and sign his or her name. These were scored for imitation, i.e., whether the white or black examiner was imitated as to picture selected, color of crayon used, and name placement.

The last game involved two new adults (one black and one white) each seated in front of a Kendler-type two-choice discrimination learning apparatus. This was located behind a screen so that the child could not see them before. He or she was first asked to take a seat (which again involved a choice that was either close or distant from the black examiner), and then asked to choose the game they wished to play -- one examiner was playing the game with triangles; the other used squares as discriminanda.

There were two measures obtained from this sequence. The first was the other-race social distance score, which was the actual distance between the

black examiner and the child on the flannel board game. This score could range from 1 to 8, with the higher numbers indicating greater distance. The second measure obtained was a composite imitation and seat selection score composed of the following six indices:

(1) Person selected to sit opposite before coloring game (scored 0 for other-race selection, 1 for same-race choice);

(2) Picture imitated (0 for other-race; 1 for same-race);

(3) Color imitated (0 for other race examiner; 1 for same-race);

(4) Name placement imitated (0 for other-race E; 1 for same-race);

(5) Chair selection prior to discrimination learning game (0 for choir near black examiner; 1 for chair far from black examiner), and

(6) Examiner selected to play discrimination learning game (0 for other-race choice; 1 for same-race choice).

Thus, on this composite measure, scores could range from 0 (least prejudiced) to 6 (most prejudiced).

Experimental Phase

Group Interaction Technique - In this procedure, the children worked in groups of four. In the experimental condition, there were two black and two white children, whereas in the control group all the children were white. Sex and age were always kept constant.

The children were told that they, as a team, were going to be asked to put together a very large wooden abstract jigsaw puzzle. They were told they would be timed and the fastest team would be awarded a prize. The children then chose a name for their team. They were each given four pieces of the sixteen piece puzzle and cooperation was emphasized in order to put the puzzle together well. While the children were working, the examiner, using

a Polaroid camera, took a picture of each team in action. If the puzzle was finished within 10 minutes, the children were told that they could put the puzzle together again and try to beat their own time. The reason for this was to have them work together approximately 15 minutes in order to keep the amount of time constant for all four treatments. When they were finished, the examiner took another picture of the team kneeling by the completed puzzle.

It is interesting to note that although cooperation was stressed in the instructions, the black and white children often worked in teams of two, i.e., with the same-race child. Thus, the children frequently changed what was to be a heterogeneous group condition into a somewhat segregated parallel play situation.

Vicarious Identification - In this condition, children were tested in groups of three, and were asked to listen to a story, accompanied by corresponding slides, and then answer a few questions about it. The story is about a young boy, Benjie (for the males) or a young female, Tina (for the females) who finds his/her way home from school and, in the face of adversity, helps to get his/her sick grandmother to the hospital. The experimental group is shown black slides of Benjie/Tina and the control group is shown white slides of Benjie/Tina. The story was played on a tape recorder while the slides were simultaneously shown on a Kodak Carousel slide projector, presented to the children on the screen. At the conclusion of the story, which lasted approximately 15 minutes, the children were asked some simple questions about the story.

Stimulus Predifferentiation Groups - In this modification technique, there were two experimental groups, (distinctive labels and observation of black faces), and one control group (labels with white faces). The children were shown four slides of the same model, which varied along several dimensions: color of make-up (brown or pink-tan), the absence or presence of glasses, smile or frown, and two different wigs. The children were tested individually, and slides were

presented with a Kodak Carousel projector. In the distinctive label condition, the children were first familiarized with the individual faces for eight trials, in which the examiner told the child the name for each face. For the next 48 trials, the subject learned to associate the correct name with the correct face. He or she was corrected if the wrong name was stated and told "right" for a correct response. For the second experimental group, the child was shown the same faces in sets of two, one after the other, for the same number of exposures (i.e. 56) and asked to judge them as same or different than the preceding one. Following this, both groups were shown slides containing two faces, and asked to judge how similar the faces were on an apparatus with a sliding level attached to a meter (out of the subject's sight). This apparatus allowed the examiner to record the child's similarity judgment without a direct verbal response.

For the control group the procedure was identical to the black face label group, with the exception that the slides were of white faces, varying along the same dimensions as the black slides, i.e. glasses, facial expression and hair-do. Slides were presented for four seconds each. Reinforcement was given every ten trials for all groups in the form of statements like, "You are doing very well," etc.

There were no differences between the two experimental groups, so they were combined in subsequent analyses.

Conditioning Group - In this technique the children were tested individually and asked to play a game that had three parts. In the first part they were shown two blue boxes, one painted with a smile and the other with a frown, and asked to place ten positive (e.g. candy), and negative (e.g. spider) pictures into whichever box they thought the pictures belonged. In the second phase, the children were told they were going to play a guessing game, using an apparatus. On this machine the children saw two windows with a lever under each.

If they chose the "correct" picture, indicated by pressing the corresponding lever, a marble came out into a small tray underneath the lever. They were continually reinforced (received a marble) for choosing the black animal. This was continued until five consecutive correct responses were made, or twenty trials were administered. They were then shown a series of ten black and white animal pictures. For the last task, they were then shown a black box and a white box, and asked to sort the original positive and negative pictures again.

The control group followed the identical procedure except that the animal pictures were green and orange and the children were reinforced for selecting the orange picture.

Pretest Means

The average attitude scale scores for each of the groups at the outset of the experiment are contained in Table 1. Analyses of variance conducted on these scores (Age x Group x Treatment x Race of Examiner) revealed significant age differences on the K-Z total score ($F=15.95$) with the younger children obtaining higher scores (means of 27.87 and 24.75, respectively), the K-Z positive items (2nd grade = 12.7; fifth = 11.5; $F = 6.31$), K-Z negative items (2nd grade = 15.06; 5th grade = 13.25; $F = 14.46$), and the Koslin (2nd = 10.27; 5th = 7.50, $F = 12.02$). In addition, race of examiner effects were obtained on the Koslin (mean of black examiner = 9.82; white = 7.95; $F = 5.46$), indicating that children's scores were higher when tested by a cross-raced examiner.

The means of the pretest behavioral measures are contained in Table 2. Analyses conducted on these means revealed no overall significant differences associated with any of the main effects.

Table 1. Mean Attitude Scale Scores on Pretest

GROUP	TEST				
	K-Z Projective				
Second Grade	Positive	Negative	Total	Koslin	Friendship
Interaction-Experimental (N=8)	12.75	16.37	29.12	9.99	2.25
Interaction-Control (N=8)	13.75	15.37	29.12	11.93	1.25
Reinforcement-Experimental (N=8)	11.50	15.12	26.62	11.68	2.75
Reinforcement-Control (N=8)	12.12	14.25	26.37	10.70	2.38
Story-Experimental (N=8)	12.50	14.75	27.25	10.55	3.38
Story-Control (N=8)	12.12	14.87	27.80	8.21	2.38
Perceptual Diff.-Experimental (N=16)	13.31	14.93	28.25	9.50	1.81
Perceptual Diff.-Control (N=8)	13.38	14.87	28.25	10.27	1.12
Fifth Grade					
Interaction-Experimental (N=8)	12.12	14.50	26.62	9.24	3.25
Interaction-Control (N=8)	11.88	13.25	25.12	6.74	4.46
Reinforcement-Experimental (N=8)	11.62	12.87	24.50	7.45	2.38
Reinforcement-Control (N=8)	12.12	13.21	25.33	7.71	2.04
Story-Experimental (N=8)	11.00	13.25	24.25	6.80	3.25
Story-Control (N=8)	11.33	13.00	24.33	5.68	2.00
Perceptual Diff.-Experimental (N=16)	11.39	12.89	24.28	6.90	2.20
Perceptual Diff.-Control (N=8)	11.12	13.62	24.75	9.65	2.88

Table 2. Mean Pretest Scores on Behavioral Measures

GROUP	Composite Imitation and Choice	Social Distance
Second Grade		
Interaction-Experimental	3.12	4.87
Interaction-Control	3.19	3.97
Reinforcement-Experimental	2.56	5.34
Reinforcement-Control	3.19	5.45
Story-Experimental	3.50	4.85
Story-Control	2.50	4.72
Perceptual Diff.-Experimental	3.19	5.31
Perceptual Diff.-Control	2.81	4.47
Fifth Grade		
Interaction-Experimental	2.94	4.00
Interaction-Control	3.44	5.37
Reinforcement-Experimental	3.60	5.59
Reinforcement-Control	3.75	4.60
Story-Experimental	4.00	5.02
Story-Control	3.75	4.60
Perceptual Diff.-Experimental	3.49	4.96
Perceptual Diff.-Control	2.81	5.12

Intercorrelations of Pretest Measures

The intercorrelations of the various pretest measures employed are contained in Table 3. Perhaps the most salient aspect of this table is the relatively low relationships among the various measures. It should be recalled, however, that the range of attitude measures is somewhat attenuated since children who took the behavioral indices were those who scored in the top half of the K-Z test. Both subtest scores of the K-Z test correlate highly with the total score, but relationships between these and the Koslin are on the low side, but statistically significant. The Friendship and behavioral measures do not correlate significantly either with each other or with anything else. These findings are essentially in accordance with previously reported results (Katz, Sohn, and Zalk, 1975) and demonstrate that the various ways of assessing racial attitudes and behavior are not equivalent for children.

First Post-Test Results

Multivariate Findings - There are many ways of analyzing the data assessing change after the experimental manipulation. Since multiple measures were employed, the initial analysis utilized was a multivariate analysis of variance of the first post-test scores. The means of all the measures are contained in Table 4. They include the K-Z total, Koslin, Friendship, imitation scores and behavioral social distance. These scores were analyzed by means of a P-Stat program, version 3.06, Revision 2 (Buhler, 1971) using an IBM #360 computer, with main effects of treatment, age, race and condition. The overall treatment effect was significant ($F = 2.31$, $p < .05$) revealing that in general the experimental groups scored in a less prejudiced position after the manipulation than did the control groups. The experimentals scored lower on the K-Z test and the Koslin, reported more black friends, imitated and chose the black

Table 3. Intercorrelation of Pretest Scores

	K-Z Total	K-Z Pride	K-Z Prejudice	Koslin	Friendship	Behavior Composite Choice	Behavior Social Distance
K-Z Total	1.00	.80**	.82**	.31*	- .06	.01	- .13
K-Z Pride	.80**	1.00	.31*	.22	- .04	.06	- .10
K-Z Prejudice	.82**	.31	1.00	.28	- .06	- .04	- .11
Koslin	.31*	.22	.28*	1.00	- .19	.02	- .05
Friendship	- .06	- .04	- .06	- .19	1.00	- .09	- .01
Behavior Composite	.01	.06	.04	.02	- .09	1.00	.06
Behavior Social Distance	- .13	- .10	- .11	- .05	.01	.07	1.00

* = Significant at .05 level

** = Significant at .01 level

experimental somewhat less, but played somewhat closer to her. A significant triple interaction of condition x age x race of examiner indicated that some rather complex patterns were evident. These were anlyzed in more detail by individual analyses of variance for the different measures and different conditions.

Individual Analyses of Variance. In order to assess specific patterns of change, individual analyses of variance were conducted for each of the major measures.

Katz-Zalk Test - Analyses of this measure on combined groups revealed no significant differences on the first post-test for either total score or the negative subtest score. On the positive items subscale, however, a significant treatment effect was found. The means for the experimental and control subjects were 10.58 and 12.12, respectively, indicating a lower score associated with the experimental manipulation ($F = 8.04$).

When the various experimental conditions are considered separately, no differences were obtained on either the total or subscale scores for the group interaction or conditioning treatments. A significant treatment effect was found for the stimulus differentiation condition, indicating that the control that utilized white faces as stimuli had higher scores on all portions of this measure than did the experimental subjects. The means on the total scores were 21.80 and 27.50 for the experimentals and controls, respectively. The corresponding experimental and control means for the prejudice subscale were 11.75 and 14.19 ($F = 3.46$) and for the positive items 10.05 and 13.31, respectively ($F = 5.10$). Thus, there were clear-cut differences obtained on the K-Z measure for the perceptual training condition.

Table 4. First Post Test Means for Multivariate Analysis

AGE	MEASURE	GROUP							
		Interaction		Story		Reinforcement		Perception	
		Exp.	Control	Exp.	Control	Exp.	Control	Exp.	Control
2nd Grade	Katz-Zalk	25.62	24.83	23.00	23.79	23.62	23.37	23.81	28.62
	Koslin	11.69	10.48	10.69	10.49	10.56	9.39	12.06	6.57
	Friendship	2.29	1.38	3.33	1.25	1.12	.62	1.00	1.00
	Behavioral Distance	4.80	4.60	4.95	4.70	4.00	4.22	4.77	5.35
	Behavior Composite	2.62	2.69	2.75	2.88	3.69	2.62	3.00	3.19
5th Grade	Katz-Zalk	24.25	24.37	21.62	20.17	22.25	24.41	20.05	26.38
	Koslin	9.02	7.34	9.44	9.15	6.20	7.67	7.89	8.95
	Friendship	2.88	2.12	3.12	3.92	3.25	1.91	2.05	2.75
	Behavioral Distance	5.25	4.70	4.35	4.50	4.95	5.03	4.88	5.80
	Behavior Composite	3.12	2.94	3.25	2.50	3.44	2.58	3.07	2.31

For the story condition, significant race of examiner x age interactions were obtained for total K-Z scores ($F = 7.04$) and the prejudice subscale ($F = 6.24$). The trend in both instances was for younger children to obtain lower scores with a black examiner and older children to exhibit lower scores with a white examiner. For the pride subscale with the story condition, a triple interaction of race of examiner x age x treatment was obtained, indicating that the story using black characters was only effective in reducing pride scores (relative to the white character controls) with the younger group when tested by a black examiner.

Koslin Social Distance Scale - No significant differences were obtained on this measure for combined groups, the reinforcement or group interaction conditions. With the story subjects, a race of examiner x age interaction ($F = 5.05$) was found, revealing a similar trend to that found with the K-Z scores, i.e., younger subjects appear less prejudiced with a black examiner whereas the reverse is true for older subjects. Additionally, a race of examiner x age x treatment interaction was found ($F = 4.57$) indicating that the experimental manipulation was effective on this measure for younger subjects tested by a black examiner and older subjects tested by a white examiner. For the stimulus differentiation condition, a treatment x age effect was found ($F = 4.52$), indicating predicted effects for the older subjects, and a reversal for the younger ones, i.e., the control group exhibited less prejudice than the experimental.

Friendship Questionnaire - For all treatments combined, an age difference was obtained ($F = 7.46$), revealing more black choices for the older group. No significant differences were obtained on the Friendship Questionnaire for the conditioning, group interaction, or story condition when analyzed separately. For the stimulus differentiation condition, a significant age effect was obtained ($F = 4.94$) indicating that older white

children had more black choices than did younger ones. The means were 2.40 vs. 1.00, respectively.

Behavioral Composite - An analysis conducted with all treatments combined revealed a significant race of examiner x condition interaction ($F = 3.21$), indicating that the subjects showed more cross-raced imitation and choice in the story and group interaction condition when tested by a black examiner and in the reinforcement and stimulus differentiation condition when tested by a white examiner. Analyses conducted separately for the various conditions revealed no significant differences in imitation for group interaction or stimulus differentiation. A treatment effect in the reverse direction was obtained in the reinforcement condition (the means were 3.56 and 2.60 for the experimentals and controls, respectively, $F = 4.08$). For the story groups, only the race of examiner effect was significant ($F = 5.40$), indicating that more cross-raced imitation occurred when the instructions were administered by a black examiner.

Behavioral Social Distance - An analysis conducted on this measure for all groups combined revealed a significant triple interaction of race of examiner x condition x treatment ($F = 2.96$). The means for this interaction are contained in Table 5. It should be recalled that the greater the number, the more distance displayed.

It can be seen from the table that the experimental reinforcement and story groups reduced distance only when instructions were administered by a black examiner, whereas the perceptual experimental manipulation was effective with both, but more so with a white examiner. The interaction manipulation was not effective with either examiner.

When the various conditions are analyzed separately, a marginally significant age effect ($p < .06$) emerged in the reinforcement condition,

Table 5. Behavioral Social Distance Scores

RACE OF E	TREATMENT	CONDITION			
		Reinforcement	Story	Interaction	Perception
Black	Experimental	21.67	20.38	25.38	25.29
	Control	24.92	26.00	21.12	27.25
White	Experimental	23.12	26.12	24.87	23.00
	Control	21.38	20.01	25.38	28.50

indicating that younger children played closer to the black examiner than did older ones. For the group interaction condition, no significant effects were found. A race of examiner x treatment interaction was found for the story manipulation ($F = 5.05$) indicating that the experimental subjects had lower scores than the control with a black examiner, whereas the reverse was true with a white examiner. For the stimulus differentiation condition, two significant effects were found: a treatment effect ($F = 4.02$) in the expected direction (experimentals had a mean distance of 4.76 vs. 5.57 for the controls), and a race of examiner by age interaction ($F = 4.89$). This latter finding revealed that older children exhibited greater distance from the black examiner than younger children did, particularly when instructions were administered by a white examiner.

The various significant effects obtained on the first post-test are summarized in Table 6.

Second Post Test Results

Multivariate findings - A multivariate analysis of variance utilizing K-Z total score, Koslin, Friendship, behavioral composite measures and other race social distance for all treatment conditions found no significant differences

Table 6. Summary of Significant Findings on First Post Test

	Condition				
Measure	Interaction	Story	Reinforcement	Perception	Combined Groups
K-Z Total	No diff.	RE x Age	No diff.	Treatment[1]	No difference
K-Z Negative	No diff.	RE x Age x Treat.	No diff.	Treatment[1]	No difference
K-Z Positive	No diff.	RE x Age	No diff.	Treatment[1]	Treatment[1]
Koslin	No diff.	RE x Age; RE x Age x Treat.	No diff.	Treatment 1 x Age	No difference
Friendship	No diff.	No diff.	No diff.	Age[4]	Age[4]
Behavior Composite	No diff.	RE[5]	Treatment[2]	No diff.	RE x Condition
Behavioral Distance	No diff.	RE x Treat.	Age[3]	Treatment[1] RE x Age[3]	RE[7] x Condition Treatment[1]

Table Footnotes:

1 = Experimentals show less prejudice than controls.
2 = Controls show less prejudice than experimentals.
3 = Younger subjects show less prejudice than older ones.
4 = Older subjects show less prejudice than younger ones.
5 = Less prejudice with same-raced E.
6 = More prejudice with same-raced E.
7 = Experimental treatment effective with Black E.
8 = Experimental treatment effective with White E.

for the combined score. These means are contained on Table 7. There were, however, several comparisons with regard to individual measures and particular treatments that did show some effects. These will be delineated below.

Multivariate analyses conducted separately for each condition yielded non-significant differences for the story, group interaction and reinforcement conditions. For the stimulus differentiation condition, significant effects were obtained for age, the age x treatment and the race of examiner x treatment interactions. The age effect indicated that the younger children exhibited higher prejudice scores than the older ones. The age x treatment interaction reveals a more pronounced difference between the experimental and control groups for the younger subjects. The interaction between race of examiner and treatment suggests that the white examiner was more effective than the black one in reducing negative attitudes on this task.

Individual Analyses of Variance

K-Z total scores. Analysis of this measure over all conditions revealed significant age ($F = 12.95$) and treatment ($F = 5.79$) effects. The age effect is attributable to the younger subjects obtaining higher scores than older ones (means of 25.79 and 21.63, respectively). The treatment effect reveals that all subjects in the experimental groups obtained lower scores (22.73) than did the controls (25.21). Analysis of the individual conditions revealed only age differences for the story and stimulus predifferentiation manipulations.

K-Z positive items. Significant age differences ($F = 6.83$) were also obtained with regard to the positive items for all conditions combined and individually for the reinforcement manipulation. These were in the same direction as mentioned above, namely, the young subjects exhibited higher scores.

Table 7. Second Post Test Means

AGE	MEASURE	GROUP							
		Interaction		Story		Reinforcement		Perception	
		Exp.	Control	Exp.	Control	Exp.	Control	Exp.	Control
2nd Grade	Katz-Zalk	24.88	26.12	23.12	27.75	23.92	27.12	24.43	29.00
	Koslin	11.25	9.10	7.43	8.08	9.13	11.70	9.79	7.79
	Friendship	2.50	1.75	3.00	.62	1.38	1.12	.62	1.00
	Behavioral Distance	4.70	5.22	4.80	4.77	4.63	4.65	4.46	5.24
	Behavior Composite	2.88	2.44	2.12	3.19	3.46	2.75	2.82	2.69
5th Grade	Katz-Zalk	22.25	25.62	19.88	20.17	21.83	22.75	21.49	23.12
	Koslin	9.70	8.70	6.38	7.58	7.73	14.00	7.92	8.23
	Friendship	3.25	2.25	3.25	3.33	3.12	2.88	2.67	1.75
	Behavioral Distance	4.92	4.67	4.90	5.56	5.33	4.72	4.34	4.67
	Behavior Composite	3.25	2.62	2.94	2.50	2.88	2.25	3.35	3.12

K-Z negative items. Analysis of the negative item subtest scores for all conditions combined yielded a significant effect attributable to age ($F = 12.28$) and treatment ($F = 5.70$). The age effect was similar to that described above; older subjects showed lower scores. The treatment effect was in the expected direction with the control subjects obtaining higher scores than the experimental ones (11.92 and 13.46, respectively).

Age effects were also obtained on individual analyses conducted for the reinforcement, story and stimulus predifferentiation conditions. In addition, treatment effects were found (in the expected direction) for the story manipulation. Race of examiner effects were significant ($F = 6.10$) for the reinforcement condition, with the black examiner eliciting lower scores than the white examiner. This discrepancy was particularly pronounced in the older subjects, and the race of examiner x age interaction was significant here.

Koslin. For this measure, age effects were obtained for all conditions combined ($F = 5.38$) and for the reinforcement manipulation individually. In both instances, the older subjects exhibited lower prejudice than their younger counterparts.

Friendship Questionnaire. Significant differences were found for the age variable for all treatments combined ($F = 10.33$), and the reinforcement, story and stimulus predifferentiation conditions when analyzed individually. A significant age x treatment interaction ($p < .05$) was obtained for the story condition, suggesting that the treatment was more effective for the younger subjects.

Behavioral Composite Index. An analysis across all treatments revealed a significant triple interaction of race of examiner x age x treatment ($F = 3.97$). Table 8 contains these means. It should be recalled that higher numbers mean higher prejudice scores.

Table 8. Behavioral Index Means

Race of Examiner	Age	Treatment	
		Experimental	Control
Black	2nd	3.07	2.62
	5th	2.83	2.78
White	2nd	2.57	2.91
	5th	3.37	2.47

This table suggests that the experimental condition was effective only for the younger subjects when instructions were by a white examiner. For the fifth graders, however, the effect was reversed and control subjects imitated the black examiner more.

Individual analyses of variance revealed no significant differences for the story and reinforcement procedures, a race of examiner x age interaction ($F = 4.35$) for the stimulus predifferentiation condition, and a race of examiner x age x treatment interaction ($F = 9.58$) for the puzzle group. The race of examiner x age interaction indicated that for the stimulus predifferentiation condition, younger subjects have higher scores with the black one. The triple interaction for the puzzle group reveals the same trends discussed in conjunction with Table 8, namely, that the treatment is effective for the younger subjects with a white examiner, whereas the black examiner is a more effective treatment administrator for the older ones.

Behavioral Social Distance. The only significant difference to emerge from analyses of this measure was an age x treatment interaction for the stimulus predifferentiation condition. Although the experimental subjects generally exhibited lower scores than the controls, this difference was more pronounced for the younger subjects.

Summary of Second Post Test Scores. Table 9 presents a summary of the second post-test findings.

Other Findings

Sex bias study. As noted in the procedure section, a sex bias score was obtained for all subjects on the Katz-Zalk instrument. Since there was no reason to assume that the treatments would have any effect on these scores, only the pre-test measures were analyzed, utilizing a five-way analysis of variance which included sex, grade, race of child and geographical location (urban vs. suburban) as between-subjects effects and type of item (positive vs. negative) as a within-subject effect.

This analysis yielded a number of significant main and interaction effects. Significant main effects obtained were sex of child ($F = 136.59$, $p < .001$), grade ($F = 34.19$, $p < .001$) and type of item ($F = 261.66$, $p < .001$). These findings indicated that females had higher overall scores than males (.70 vs. .56, where .50 indicates no bias), and that younger subjects showed more sex bias than did older ones (.66 vs. .59). Sex pride scores were higher than sex prejudice scores, i.e., children were more likely to attribute positive attitudes to their own sex than they were to attribute negative attributes to the other sex.

Additionally, significant interactions of sex x type of item ($F = 231.29$, $p < .001$) and grade x type of item ($F = 5.09$, $p < .01$) were obtained. The first interaction reveals that the difference between boys and girls was primarily on the negative items, i.e. boys were selected more for negative attributes by both sexes. The second interaction indicated that the decrease in bias scores with age is more exaggerated with the pride scores.

In addition, the triple interaction of sex x grade x location was significant ($F = 4.71$, $p < .05$) indicating that girls from the urban en-

Table 9. Summary of Significant Findings on Second Post-Test

Measure	Condition: Interaction	Story	Reinforcement	Perception	Combined Groups
K-Z Total	No sig. diff.	Age[4]	No sig. diff.	Age[4]	Age[4] Treatment[1]
K-Z Negative	No sig. diff.	Age[4] Treatment[1]	Age[4] Race of E[6]	Age[4]	Age[4] Treatment[1]
K-Z Positive	No sig. diff.	No sig. diff.	Age[4]	No sig. diff.	Age[4]
Koslin	No sig. diff.	No sig. diff.	Age[4]	No sig. diff.	Age[4]
Friendship	No sig. diff.	Age[4] Age x Treat.	Age[4]	Age[4]	Age[4]
Behavior Composite	Race E x Age x Treatment	No sig. diff.	No sig. diff.	Race E x Age	Age x Race of E x Treatment
Behavioral Social Dist.	No sig. diff.	No sig. diff.	No sig. diff.	Age x Treatment[1]	No sig. diff.

Table Footnotes:

1 = Experimentals show less prejudice than controls.
2 = Controls show less prejudice than experimentals.
3 = Younger subjects show less prejudice than older ones.
4 = Older subjects show less prejudice than younger ones.
5 = Less prejudice with same-raced E.
6 = More prejudice with same-raced E.
7 = Experimental treatment effective with Black E.
8 = Experimental treatment effective with White E.

vironment show more of a decrease in scores with age than do the other groups. This was particularly pronounced with the sex pride scores, as evidenced by a significant four-way interaction, sex x grade x location x type of item.

These findings have been accepted by the American Psychological Association for presentation at its September, 1976, convention. The paper is included in the Appendix, and the study was conducted by the Principal Investigator in conjunction with Sue Zalk and Jane Weiss.

Modeling Study

A post-doctoral student working on the grant (Adele Gottfried) conducted a study in conjunction with the Principal Investigator which investigated whether race, gender or belief similarity were more salient determinants of liking and imitative behavior. The subjects were 96 fifth-grade white children from a middle-class suburb near New York City.

Children viewed videotapes of models presenting an opinion in a debate about whether or not school should be in session for eleven months. The models varied along three dimensions: race (black or white), gender, and position espoused (either in agreement or disagreement with the Subject). Pre-test data indicated that almost all subjects disagreed with the position that school should be in session during the summer.

Following the experimental manipulation, subjects were given a post-test opinion questionnaire to assess attitude change, and asked to describe how they would debate the issue (to assess imitation).

Results were complex, but genererally indicated that belief and gender were more salient cues than race in eliciting attitude change and imitation. White males were preferred to white females for all subjects. Children liked the models who agreed with them better than those who dis-

agreed. These findings have been accepted for the Eastern Psychological Association, and the paper is included in the Appendix.

Discussion

The major findings of the modification study are that all experimental subjects (as a combined group) showed less prejudice than did the controls after a short-term retest. This finding is in accordance with most modification studies that have been reported in the literature. More detailed analyses, however, suggest that the manipulations were not equally effective, the varying measures were not equally sensitive, and that long-term effects were found on fewer measures.

From the results on the first post-test, it would appear that the perceptual differentiation and story treatments were considerably more effective than the interaction and reinforcement conditions. The group interaction manipulation yielded no significant differences with regard to any of the measures, and the reinforcement condition elicited a reversal in behavioral imitation. The group interaction technique might be conceptualized as a microcosm of desegregation. Pettigrew's differentiation (1969) between desegregation and integration seems particularly germane here for what we found was that although four children were together in the same room, ostensibly engaged in the same task, the black children and the white children tended to play separately. DeVries and Edwards (1973) have presented data which also suggests that children of different races do not integrate themselves automatically, but rather must be specifically rewarded for interaction. Thus, the structuring of the environment appears to play a salient role in determining whether integration will even take place.

The relative ineffectiveness of the reinforcement technique is somewhat surprising in view of the fact that positive findings have previously been re-

ported (Edwards and Williams, 1969). It should be noted that neither the younger nor older children had any difficulty learning that the black stimulus was the one associated with reinforcement. Although they almost invariably chose the white stimulus on the first trial, it seldom took more than one or two additional trials before subjects were responding with accuracy. The problem seemed to be the lack of generalization of this response to the other measures. It is as if they learned very quickly that choosing black gets the marble out of the machine, but this approach response did not, for the most part, extend to people. Positive findings with this technique have been found by previous investigators, although it has generally been obtained with nursery and kindergarten subjects. It may well be that the reinforcement approach either (a) needs to be more sustained, or (b) is only effective with very young children.

The stimulus differentiation manipulation appeared to be a relatively strong one. It significantly decreased prejudice scores on all parts of the Katz-Zalk test, on the Koslin for the younger subjects, and decreased behavioral social distance between the white child and the black examiner. This technique has been previously demonstrated as effective, when change was measured by the Katz-Zalk test and a social distance scale (Katz, 1974). In this study, the effects were additionally apparent on the Koslin test, on a behavioral measure as well, and in a long-term retest of the Katz-Zalk test. It is interesting to note that the procedure of having subjects learn to deindividuate faces of another race, and attend to within-group (rather than between-group) differences is perhaps the most neutral of the techniques used, and perhaps the longest lasting.

The vicarious contact (i.e. the story) approach also elicited a number of changed responses after the manipulation. These were not simple treatment

effects, however, but rather involved in interactions with either age level or race of examiner. The story with black protagonists seemed most effective in reducing negative attitudes for the younger white children when tested by a black examiner. This same trend was also seen in scores on the Koslin index, the Katz-Zalk positive item subscale, and the behavioral social distance index. It is impossible to ascertain whether the more pronounced effect with the younger subjects is due to the characteristics of the particular story chosen, or to more general aspects of the dramatic approach. Additional testing of other kinds of materials would be needed to assess this. It should be noted that this is only technique that elicited gender effects, in that the girls exhibited more of a change than the boys did. This suggests that it may have been that the theme of the particular story used had more relevance to younger girls than to boys and older girls

Of all the measures used on the first post-test, the Friendship Questionnaire appeared least sensitive to treatment effects. None of the children reported more black friends after the manipulations. Moreover, this measure did not correlate significantly with any of the others.

The results on the second post-test, conducted four months after the first, reveals a somewhat different pattern. As might be expected, there are fewer significant differences attributable to treatment effects. The overall treatment effect for all conditions combined, however, is maintained on the Katz-Zalk test. Analyses of the individual conditions, however, reveal fewer treatment effects. The perceptual differentiation condition, seemingly the most effective on the first post-test, was effective after four months in reducing behavioral social distance. This effect was more pronounced for younger subjects. No significant treatment effects were obtained for the reinforcement condition. The group integration technique was almost as ineffective on the second post-test as it was on the first, although some increase in cross-race

examiner choice and imitation was obtained for younger subjects, when tested by a black examiner. The story technique appeared to maintain some gains after a four month interval in that treatment effects were obtained on the negative subtest of the Katz-Zalk questionnaire, and an increase in the number of black friendships was obtained for the younger subjects.

One other difference that emerges when the first and second post-tests are compared is the greater incidence of significant age differences on the second post-test. Age differences were obtained with regard to almost all of the measures used, in the direction of lower prejudice scores for the older groups. Since most of these trends were not exhibited at the outset of the study, it is possible that they reflect the greater sensitivity of the older children to repeated testing, and perhaps a greater reactivity to implicit experimenter expectations. This suggests that perhaps a more appropriate method for assessing long-term change in future studies is to eliminate the first post-test for some of the groups.

In summary, it would appear that of the four attitude change techniques utilized in the present study, the perceptual differentiation and vicarious contact approaches appear to be the most promising for reducing prejudicial attitudes and behavior for white grade school children. Although not all the gains made soon after the experimental manipulations were apparent after four months, the overall effect of the treatment variable for all conditions was, in fact, significant, relative to the control group children who were also given repeated testing. In view of the fact that the treatment in all cases consisted of only fifteen minutes of the child's time, it may be nothing short of astonishing to discover that its effect could last for four months. The overall message to be gleaned from these findings is that the attitudes of grade school children remain quite malleable, and that schools could be doing a good deal more to counteract racial prejudice in children.

Staffing on Project

Sue Rosenberg Zalk, Ph.D., Associate Director

Adele Gottfried, Ph.D., Assistant Director

Karyl Robbins Lesher, Administrative Assistant

Marilyn Sohn, M.A., Research Associate

Carol Seavey, M.A., Research Associate

Lotus Dix, Research Associate

Jane Weiss, Research Assistant

Pamela Strake, Research Assistant

Wynn Rooney, Research Assistant

Joyce Johnson, Research Assistant

Deborah Fenner, M.A., Research Assistant

References

1. DeVries, D. L. and Edwards, K. J., "Student teams: Integrating desegregated classrooms," paper presented at the Annual Convention of the American Psychological Association, Montreal, August, 1973.

2. Katz, P. A., "Stimulus predifferentiation and modification of children's racial attitudes," Child Development, 1973, 44, 232-37.

3. Katz, P., Sohn, M. and Zalk, S., "Perceptual concomitants of racial attitudes in urban grade-school children," Developmental Psychology, 1975.

4. Litchner, J. H. and Johnson, D. W., "Changes in attitudes toward Negroes of white elementary school students after use of multiethnic readers," Journal of Educational Psychology, 1969, 60, 148-52.

5. Pettigrew, T. F., "Racially separate or together?" Journal of Social Issues, 1969, 28, 43-70.

6. Williams, J. E. and Edwards, C. A., "An exploratory study of the modification of color and racial concept attitudes in preschool children," Child Development, 1969, 40, 737-50.

7. Zalk, S. R. and Katz, P. A., "The Katz-Zalk Projective Prejudice Test: A Measure of Racial Attitudes in Children," In press, Journal Supplement Abstract Service, 1976.

Publications and Papers During Grant Period

(included in Appendix B)

1. Katz, P. A. Invited address, Divisions 7, 8 and 15, American Psychological Association, 1975, on racial attitudes, perception and change.

2. Zalk, S. R. and Katz, P. A. The Katz-Zalk Projective Prejudice Test: An Index of Racial Attitudes. In press, Journal Supplement Abstract Service.

3. Katz, P. A. (Editor). Towards the elimination of racism. New York Pergamon Press, 1976.

   (a) Katz, P. A. Racism and social science: towards a new commitement? Chapter 1 in Towards the elimination of racism, P. A. Katz, Editor. New York: Pergamon Press, 1976.

   (b) Katz, P. A. The acquisition of racial attitudes in children. Chapter 4 in Towards the elimination of racism, P. A. Katz, Editor. New York: Pergamon Press, 1976.

   (c) Katz, P. A. Attitude change in children: can the twig be straightened? Chapter 8 in Towards the elimination of racism, P. A. Katz, Editor. New York: Pergamon Press, 1976.

4. Zalk, S. R., Katz, P. A., and Weiss, J. Sex bias in children. Paper to be delivered to American Psychological Association, 1976.

5. Gottfried, A. and Katz, P. Influence of belief, race and sex similarities between child observers and models on attitudes and observational learning. Paper delivered to Eastern Psychological Association Meeting, 1976.

6. Katz, P. A., Katz, I. and Cohen, S. White children's attitudes towards blacks and the physically handicapped. Journal of Educational Psychology, 1975.

7. Katz, P. A., Zigler, E. and Zalk, S. R. Children's self-image disparity: The effects of age, maladjustment and action-thought orientation. Developmental Psychology, 1975, 11, 546-550.

Appendix A. Measures Used

Katz-Zalk

Opinion

Questionnaire

NAME (NUMBER)_____

SCHOOL_____

GRADE_____ CLASS_____

AGE_____ BIRTH DATE: (circle one)

Jan.	July
Feb.	Aug.
Mar.	Sept.
Apr.	Oct.
May	Nov.
June	Dec.

(check one): BOY_____ GIRL_____

DATE_____

EXAMINER_____

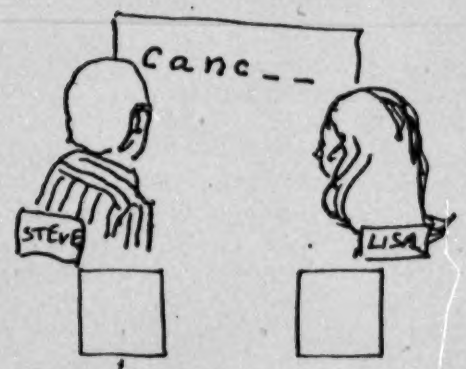
N_____

P_____

T_____

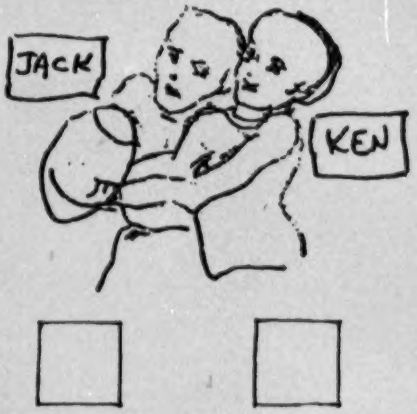
© Phyllis A. Katz, Ph.D. and Sue R. Zalk, Ph.D., 1973

1F+ 1. These two children are in a spelling contest. Who is the better speller?

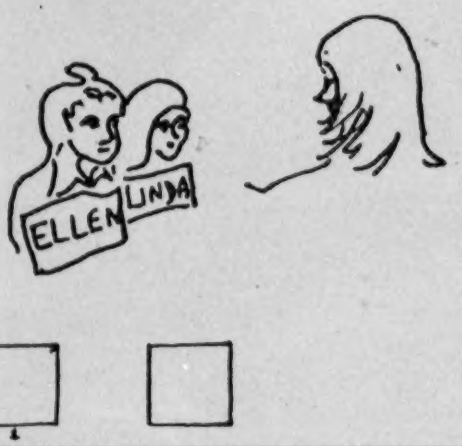


---

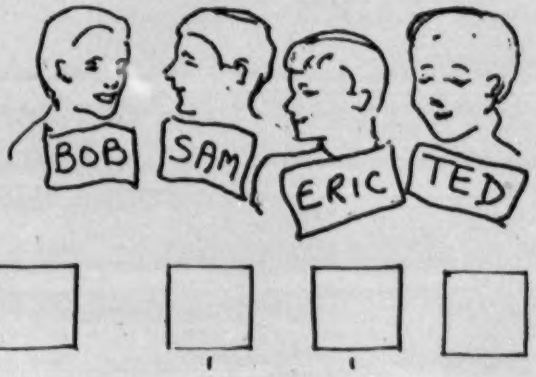
2. Both these boys caught the football at the same time, but only one of them will make the football team. Which one will make the team?



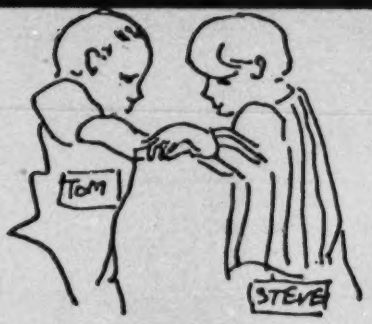
− 3. The teacher is very angry with one of these girls because she's been bad all week. Who is the teacher angry with?



+ 4. One of these boys is always invited to all the parties because everyone likes him. Which boy does everyone like?

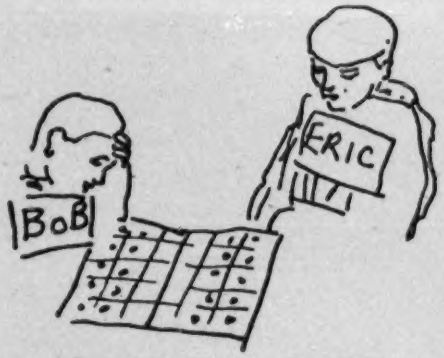


5. Steve and Tom are fighting. One of them is a bully and always starts fights. Which one is the bully?



6. These two girls are arguing. One of them is nasty and is always yelling at people. Which one is nasty?

7. These boys are playing chess. Who is the better chess player?

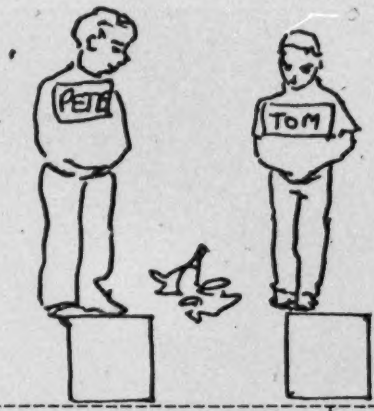


8. One of these children has trouble learning and never understands the lesson. Which one?

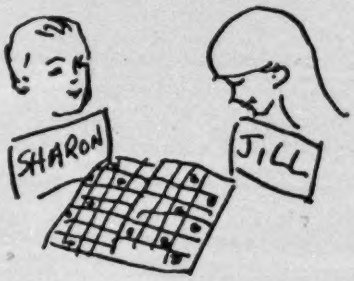
+ 9. One of these girls is going to get a medal for being the best player on the volleyball team. Which girl is getting the medal?

+ 10. These two boys are running for class president. Which one is going to win?

− 11. One of these boys threw his garbage on the floor instead of putting it in the wastepaper basket. He's going to walk away and leave it there. Who threw the garbage on the floor?



+ 12. Sharon and Jill both have six pieces left. Which child will win the checkers game?



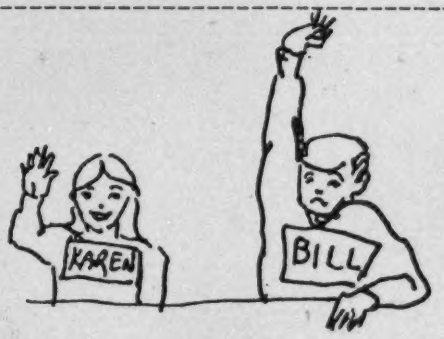
13. These two girls are about to play a game of hopscotch. Which one is going to win?

---

14. These two boys are eating candy. One of them stole his from another child. Which boy stole the candy?

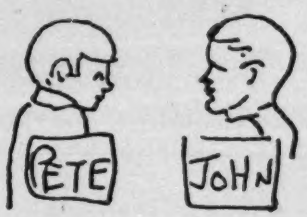
---

15. One of these children always answers the teacher's questions wrong, and never knows the right answers. Which one always answers wrong?



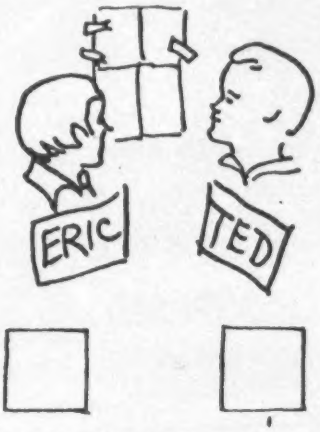
---

16. These two boys are arguing over something silly. One of these boys is always starting arguments with someone. Which one is always starting arguments?



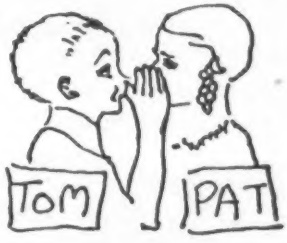
– 17. One of these girls scribbled on the other girl's painting. Who did the scribbling?

–18. One of these boys threw a brick at the classroom window and broke it. Who did it?

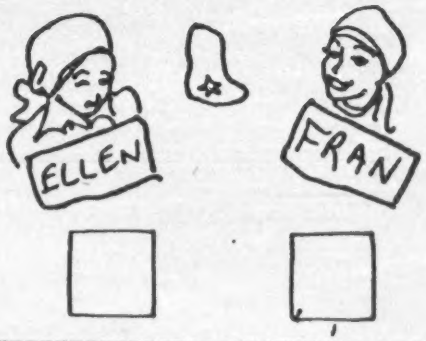


+ 19. All the girls always like to play with one of these girls because she is so nice. Which girl does everyone like to play with?

IF – 20. One of these children always tells lies about friends when they're not around. Which one?

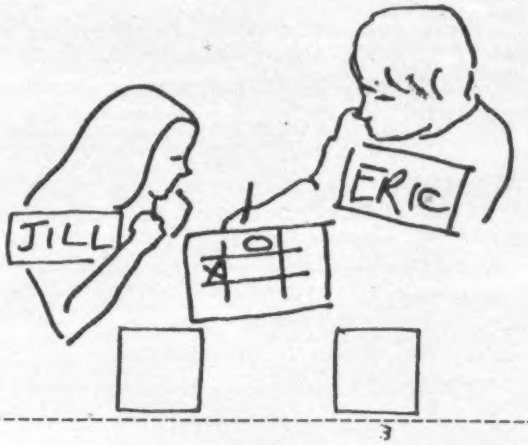


21. These two girls are trying out for the same part in a play. Who will get it?



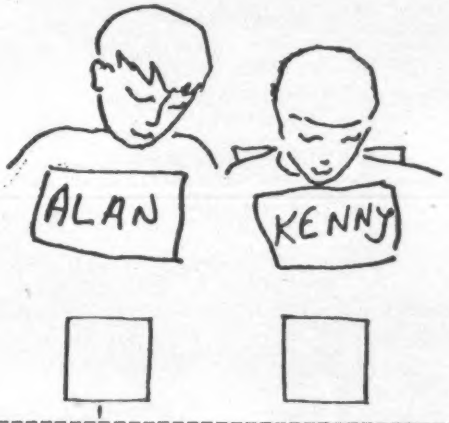
---

22. These two children are playing tic-tac-toe. Who will win?



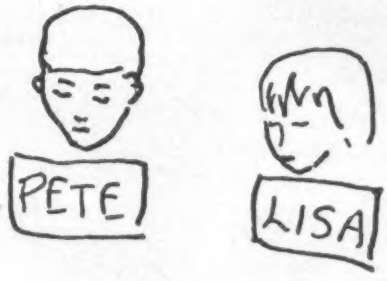
---

23. One of these boys always finishes all his lessons first and always has the right answer. Which one?



---

24. One of these children spilled paint all over the floor and left it there. Which one?



25. One of these girls was playing with matches and started a fire in the wastepaper basket. The teacher is pouring water on the fire to put it out. Which girl started the fire?

---

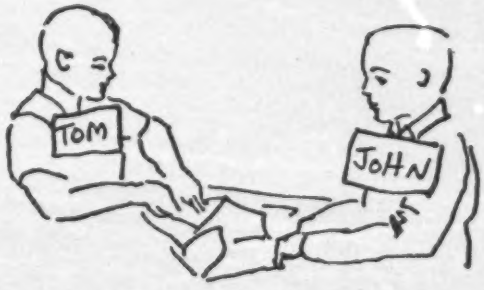
26. This picture won first prize in an art contest. Which child drew it?

---

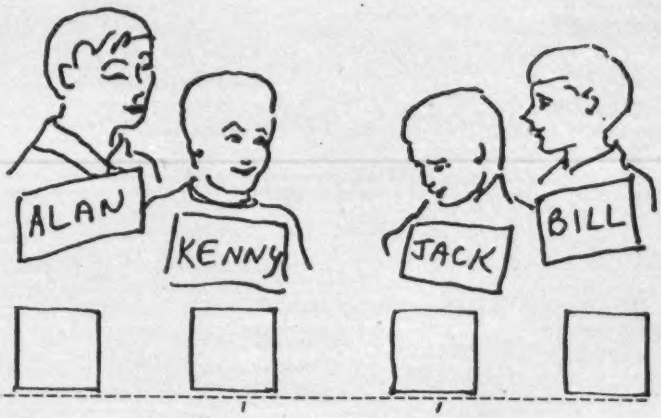
27. These two girls are both fast runners. They are going to race one another. Who will win?

---

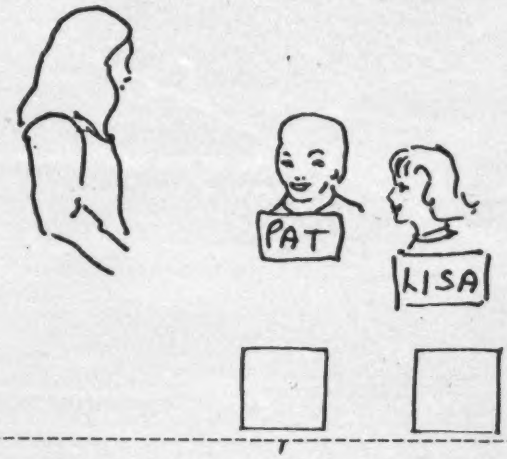
28. One of these boys got mad and ripped the other boy's shirt. Which boy ripped the shirt?



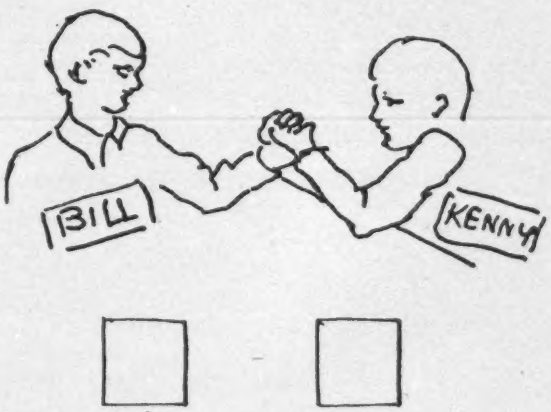
29. A boy in the class is having a party. He does not like one of these boys and is not going to invite him. Which one is not going to be invited to the party?



30. The teacher is asking both children what happened in the cafeteria. They are both telling different stories. She knows who to believe because one of the children always tells lies. Which one always lies?

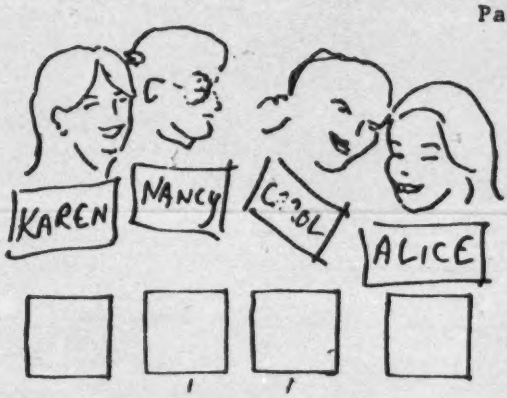


31. Bill and Kenny are having an arm wrestling match. Who will win the arm wrestling match?

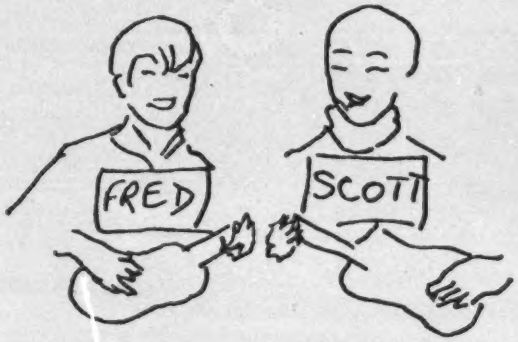


32. One of these children always takes things that belong to someone else and keeps them. Which child?

– 33. These girls are waiting to be picked for a team. Nobody likes one of these girls and she will be picked last. Which one will be picked last?

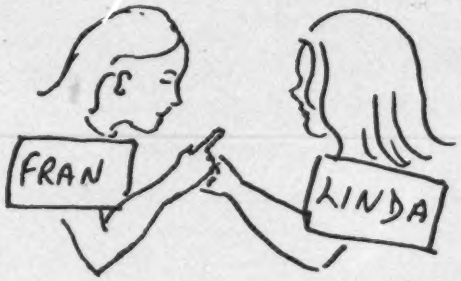


+ 34. These two boys are playing their guitars in the school talent show. Only one of them can win the contest. Which one will win?

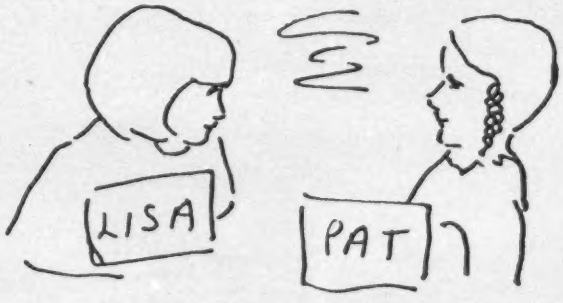


---

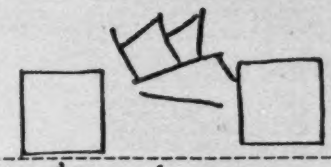
35. These children are fighting because one of these girls pulled the other girl's hair. Which one did it?



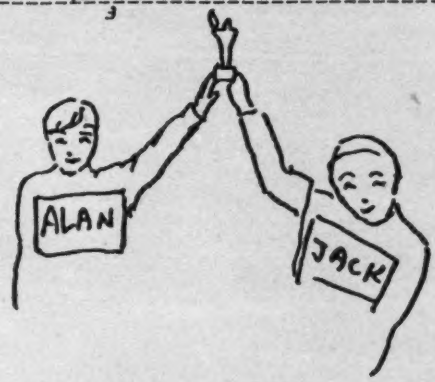
– 36. One of these kids scribbled on the classroom wall. Who did it?



MP – 37. When the teacher left the room, one of these children pulled all the papers out of the teacher's desk and threw them on the floor. Which child did it?



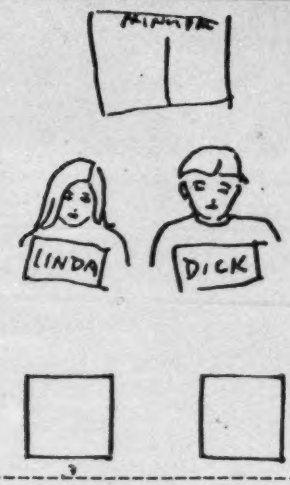
T 38. One of these boys is winning a trophy for being the best athlete in the class. Which one is winning the trophy?



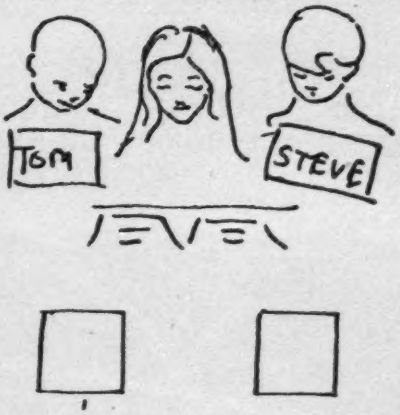
MF – 39. One of these children has no friends and is always alone. Which one has no friends?

T 40. This class just won an award. One of these children was elected to get the award for them. Which child did the class choose?

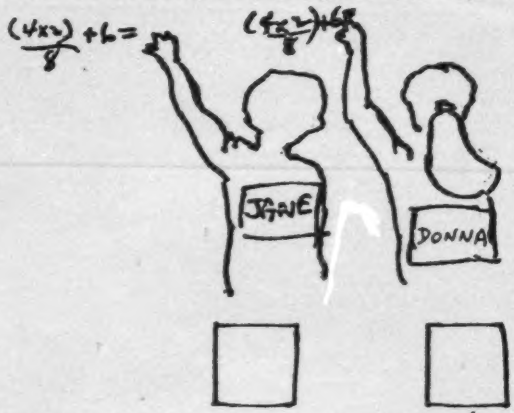
MF - 41. One of these children was bad. The other child was told to take the bad child to the principal's office. Which child was bad?



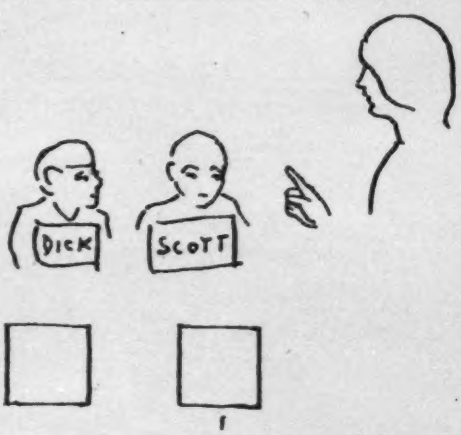
- 42. These two boys had the same answers on their tests. One cheated from the other. Which boy cheated?



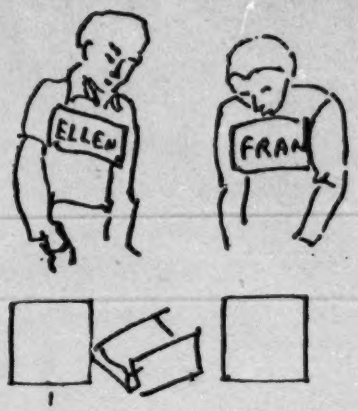
T 43. Both these girls are going to try to do this math problem. Which one will solve it?



- 44. One of these boys has been bad. The teacher is saying that she is going to punish him if he doesn't change. Which boy has been bad?

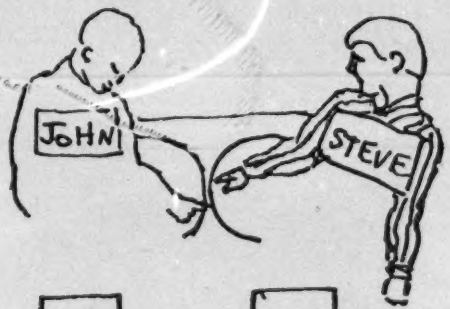


—45. One of these girls threw the other girl's books on the floor. Which one threw the books down?

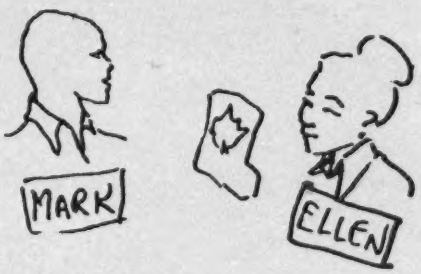


MF+ 46. One of these children always gets good grades. The teacher put that child's tests on the wall to show the class. Which child got the good grades?

T 47. These two boys are looking at maps of the moon. One of these children is the best in his class in science. Which one?

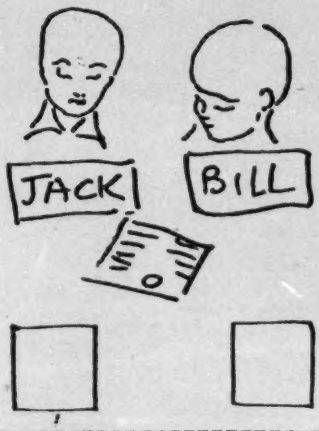


MF+48. One of these children is always elected by the other children to take over when the teacher has to leave the room. Which one?



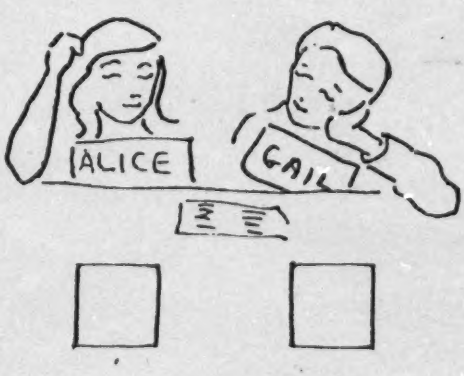
— 49. The teacher left this money on her desk. One of these children is thinking about taking the money and keeping it. Which child may take the money?

— 50. One of these boys never does well in school. He got all the answers wrong on his test. Which one?



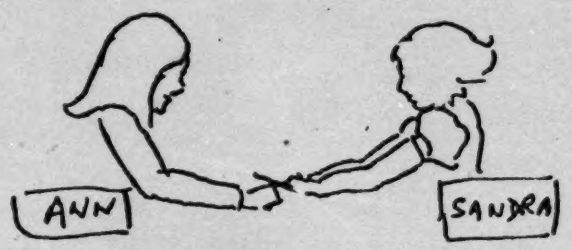
— 51. One of these girls is nasty and is pushing the other girl out of her seat just to be mean. Which girl is mean?

+ 52. One of these children is very smart and got 100% on the test. Which child?



– 53. These girls are trying to take the same coat. It belongs to one of them. Which girl owns the coat?

– 54. Both girls are pulling on a puzzle. The puzzle belongs to one of the girls and the other one is trying to take it away. Which girl is trying to take away the puzzle?



+ 55. MF One of these children is very popular and has a lot of friends. Which child?

FRIENDSHIP QUESTIONNAIRE

Number:_____ Class:_____

School:_____ Date:_____

E:_____ Gender: Boy Girl

A. Write the names of 3 children in your class that you play with most in school:

1._____

2._____

3._____

B. Write the names of 3 children in your class you would invite to a birthday party at your home:

1._____

2._____

3._____

C. Write the names of 3 children in your class you would like to do schoolwork with:

1._____

2._____

3._____

D. Write the names of 3 children in your class you would like to have on your side in a game:

1._____

2._____

3._____

The PEOPLE Test

NAME _____

TEACHER _____

SCHOOL _____

GRADE _____

CITY _____

Do not write
in this space _____

_____

53

54

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

55

56

1

1

1

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

1

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

1

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

1

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

63

64